

## Abstract

A method for the continuous real time tracking of the position of at least one mobile object in a defined multidimensional space comprising at least one mobile transmitter module which is attached to at least one mobile object, the signals from said module being received by a stationary receiving and signal processing network and then centrally processed. The signals emitted by the transmitter module are electromagnetic waves sent within a frequency band range using time division multiplex techniques. Due to the fact that the frequency band is used as a single channel for the purpose of maximizing the accuracy with which a position is detected, and due also to the fact that the communication process between the transmitters ( $S_p, S_b$ ) and the receivers ( $E_1, \dots, E_n$ ) is based on the principle of pseudo-random time division multiplex using burst transmissions of low cross correlation with non synchronized pseudo-random patterns, there is created a method for the continuous tracking of the position of one or more mobile objects at any time and in any place which is of very high positional resolution and has a temporal resolution of just a few milliseconds. (Fig. 1)